

THE IMMIGRATION OF LEPIDOPTERA TO THE BRITISH ISLES IN 1993

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IN 1993 BOTH THE regular and scarcer immigrants were well below their usual numbers. Only single records of the Bordered Straw *Heliothis peltigera* ([Denis & Schiffermüller]) and Scarce Bordered Straw *Heliocoverpa armigera* (Hübner) were received and were, when compared with the relevant abundance of these two species in recent years, good examples of the paucity of migrants for the year. Reports of about seventy Clouded Yellow *Colias croceus* (Fourcroy) were a dramatic contrast to the record numbers noted the previous year and, with the status of a "scarcer species", all records have been detailed in Annex 1.

Fortunately even the poorest migrant years have their highlights and in 1993 there were the second British records of both Porter's Rustic *Proxenus hospes* (Freyer) and Tawny Prominent *Harpyia milhauseri* (Fabricius), and the fourth example of Radford's Flame Shoulder *Ochropleura leucogaster* (Freyer). The three records of Dusky Hook-tip *Drepana curvatula* (Borkhausen) represented a record total for a single year and brought the total number of specimens noted in Britain to nine. First prize must go to the specimen of the Rosy Underwing *Catocala electa* (Vieweg) found fluttering during the day in the car park of the Old Bill Lighthouse on Portland, Dorset, and presented to the resident entomologist of the local bird observatory. This is only the second example of this spectacular species to have been reported in the British Isles this century.

Details of the commoner species which in previous years have been summarised in the preamble are to be found in Annex 2.

In the hope of aiding the compilation of the migrant reports for future years and enabling a quicker publication it is requested that records should be stated clearly with as full details as possible and ideally the Watsonian vice-county should be given. If it is not possible to give the vice-county, a six figure grid-reference would aid the placing of the record within a vice-county at the compilation stage. The dates given for the records should be the day of the sighting, or if from a light trap it should be the date of the evening that the trap was operated. If the date given with the records is for the following morning, this should be stated clearly so that the records could be suitably amended to ensure a consistent approach.

The species listed in the annexes are laid out following Bradley & Fletcher (1979), although the nomenclature has been updated utilising Karsholt & Razowski (1996). Several records were supplied by more than one contributor and it is possible that some duplication of records has occurred,

although every effort was made to eliminate this. Little attempt has been made to interpret locality data and it is possible that the same site is occasionally treated by different names. Records placed in square brackets either require confirmation, are known to be releases or, as in the case of the Cypress Carpet *Thera cupressata* (Geyer), are of individuals that are considered to be resident but are included for interest. The abbreviations listed below are used in Annex 1.

Abbreviations

I	Primary immigrants
R	Resident
R(i)	Recent resident/Invader
R(t)	Temporary resident
V	Vagrant/wanderer

ANNEX 1: RECORDS OF "SCARCER" SPECIES

PYRALIDAE

Sitochroa palealis ([Denis & Schiffermüller]) [I?/R?/R(t)?]

Note: Possible immigrant examples only.

SOUTH HAMPSHIRE (11): Beaulieu, 20.6 (BIJ per BG); Hayling Island, 12.7 (R.R. Cook); NORTH HAMPSHIRE (12): East Stratton, 21.7 (A.M. James per BG); EAST KENT (15): Dungeness, 7.7 (SPC).

Ostrinia nubilalis (Hübner) [I?/R?/R(t)?]

Note: Records outside Thames estuary only.

SOUTH HAMPSHIRE (11): Bitterne, 29.7 (P.A. Budd per BG); Brockenhurst, undated - 3 (J.E. Chainey per BG); EAST SUSSEX (14): Peacehaven, 10.6; 7.7; 20.7 (CRP); EAST KENT (15): Greatstone, 11.10 (BB per SPC).

Udea fulvalis (Hübner) [I?/R(t)]

ISLE OF WIGHT (10): Freshwater, 8.8; 11.8 (SAKJ); SOUTH HAMPSHIRE (11): Christchurch, 7 - several (MJ per BG).

Palpita unionalis (Hübner) [I]

WEST SUSSEX (13): Thorney Island, 6.6 (per M. Kenefick per CRP); WEST SUSSEX (13): Beeding, 16.8 (GH per CRP); EAST SUSSEX (14): Newhaven, 24.8 (per GH per CRP); Peacehaven, 13.8 (CRP); EAST KENT (15): Dungeness, 11.9 - 1 male (SPC); Littlestone, 10.10 - 1 female (KR per SPC); SOUTH ESSEX (18): Bradwell-on-Sea, 19.9 - 1 female; 11.10 - 1 female (AJD).

Conobathra tumidana ([Denis & Schiffermüller]) [I?]

WEST SUSSEX (13): Pagham, 14.8 (BFS).

Dioryctria abietella ([Denis & Schiffermüller]) [I?/V?]

SURREY (17): Addington, 9.6 (BFS).

Ancylosis oblitella (Zeller) [I?/R(t)?/R?]

ISLE OF WIGHT (10): Chale Green, 23.7 (SC per BG).

PIERIDAE**Clouded Yellow *Colias croceus* (Fourcroy) [I]**

WEST CORNWALL (1): The Lizard, 25.8 (J. Whiteside); Old Town Bay, St. Mary's, Isles of Scilly, 27.5 (R.D. Penhallurick); Isles of Scilly, mid 10 - "one or two reported, but no further details" (VT); EAST CORNWALL (2): Portquin, nr. Port Isaac, 1.7 (AG); SOUTH DEVON (3): Locality not given, "small arrival ... was evident for several days beginning 7.8" (VT); Churchstone, nr. Kingsbridge, 5.8 (P. Sanders per VT); Strete gate, Slapton Sands, 8 - 20; 1.9; 3.9; 10.9 - 2; 11.9; 15.9 - 2; 16.9 (HLO'H); DORSET (9): Ballard Down, undated - 3 (B. Shreeve); Portland, 5.8 - 2 male; 2.9 - 1 male (A. Harmer); 6.8 to 18.8 - 4; 26.8 - 5; 27.8 - 2; 28.8 - 2; 29.8 - 2 (MC); ISLE OF WIGHT (10): Binstead, 24.10 (BJW per SAKJ); Gorecliff, Blackgang, 7.5 (AW per SAKJ); HAMPSHIRE: Locality not given, undated (Bowles (1993a); SUSSEX: Locality not given, undated (Bowles 1993a); WARWICKSHIRE (38): Locality not given, 6.9 (Bowles 1993b); STAFFORDSHIRE (39): Saltwells LNR, 28.7; 7.8 (per T. Beynon); SOUTH LINCOLNSHIRE (53): TF435326, undated (per A. Binding); SOUTH-EAST YORKSHIRE (61): Spurn Head, 10.9; 11.9 (BS); NORTHUMBERLAND: Locality not given, 25.9 (Bowles 1993b); CHANNEL ISLANDS (113): South coast of Guernsey, 31.5 (Mr Kinsey per Austin (1993)); Guernsey, Le Petit Pre, 31.7 (Austin 1993); Guernsey, La Corbiere, 18.8 (MH per Austin (1993)); Guernsey, Belle Elizabeth, 13.10 (MH per Austin (1993)); Guernsey, Long Cavaleux, 13. 10; 15.10 (MH per Austin (1993)); Guernsey, Mont Heralt, 18.10 (MH per Austin (1993)); MID CORK (H4): Lee Fields, 29.8 (KGMB); CO. DOWN (H38): Ballykeel, Ballygowan, 13.5 (C. Coates per IR).
Summary: (1): 3; (2): 1; (3): 30; (9): 21; (10): 2; Hampshire: 1; Sussex: 1; (38): 1; (39): 2; (53): 1 (61): 2; Northumberland: 1; (113): 7; (H4): 1; (H38): 1.

DREPANIDAE**Dusky Hook-tip *Drepana curvatula* (Borkhausen) [I]**

WEST SUSSEX (13): Church Norton, Pagham, 24.5 (RFMc); Middleton-on-Sea, 29.8 (IDM & R.J. Brooker); NORTH LINCOLNSHIRE (54): Dalby, 30.7 (Mrs M.E. Dawson per RJ).

GEOMETRIDAE**The Gem *Orthonoma obstipata* (Fabricius) [I]**

WEST CORNWALL (1): Isles of Scilly, 12.7 - 1 (RAS); St. Agnes, Isles of Scilly, 30.4; 11.5 - 1 male; 30.7; 31.7; 4.8 - 2; 13.8; 16.8; 19.8 - 2; 4.9; 12.9; 28.9 - 6; 3.10 - 3; 6.10 - 15; 10.10 - 2; 12.10 - 2; 13.10 - 5; 30.10; 4.11 - 3; 5.11 (JWH & MEH); SOUTH HAMPSHIRE (11): Leckford, 23.7 (DHS); Winchester, 31.5; 8.7 (DHS); EAST SUSSEX (14): Peacehaven, 21.9 - 1 female (CRP); EAST KENT (15): Dungeness, 20.9 - 2 (BFS); 3.11 - 1 male (SPC); Folkestone Warren, 20.9 - 1 female (TR per SPC); Greatstone, 3.8 - 1 male (BB per SPC); SOUTH ESSEX (18): Bradwell-on-Sea, 19.9 - 1 female; 20.9 - 1 male (AJD); 11.9 - 1 male; 19.9 - 1 male; 20.9 - 1 female (SD); WARWICKSHIRE (38): Charlecote, 28.7 (AG); Rugby, 6.8; 25.9 (Dr D. Porter per AG); SOUTH-EAST YORKSHIRE (61): Spurn Head, 11.10 (BS); MID CORK (H4): Cork, 22.9 (KGMB).
Summary: (1): 51; (11): 3; (14): 1; (15): 5; (18): 5; (38): 2; (61): 1; (H4): 1.

[Cypress Carpet *Thera cypressata* (Geyer) [R]

Note: All records probably represent resident examples.

DORSET (9): Durlston, 1.7 (per DB²); CHANNEL ISLANDS (113): Guernsey, St. John, 8.6 (Austin 1993); Guernsey, L'Ancrese, 19.6 (Austin 1993); Guernsey, Damouettes Lane, 17.7 (Austin 1993).]

SPHINGIDAE***Convolvulus Hawk-moth *Agrius convolvuli* (Linnaeus) [I]***

WEST CORNWALL (1): St. Agnes, Isles of Scilly, 16.8; 31.7; 8.9; 21.9; 12.10 (JWH & MEH); 25.9 - 1 washed up dead on the shoreline (A. McCrae per Waring (1993)); SOUTH DEVON (3): West Charleton, nr. Kingsbridge, 9.9 (PS per VT); NORTH SOMERSET (6): Keynsham, Bristol, 6.7 (Mrs J. Pusey per RJB); DORSET (9): Portland, 24.9 (MC); West Bexington, 18.8; 10.9; 16.9; 18.9; 23.9 (RME); ISLE OF WIGHT (10): Bembridge, 10.9 (Dr Thomas per SAKJ); Binstead, 8.9, at petunias (R. Gough per SAKJ); WEST SUSSEX (13): Hassocks, undated (DD per CRP); Portslade, 10.10 at rest on a road (D. Burchell per CRP); Walberton, 7.10 (JTR per CRP); Wick (Littlehampton), 1.7 (R. Pratt per CRP); EAST SUSSEX (14): Ringmer, 11.10 (AB per CRP); EAST KENT (15): Hythe, 3.10 - 1 male (B. Searle per TR per SPC); near Folkestone, 2.10 - 1 female (Tansley 1994); SOUTH ESSEX (18): Bradwell-on-Sea, 18.8 - 1 male (AJD); ESSEX: No locality given, 9 (Waring (1993)); EAST SUFFOLK (25): Fagbury Cliffs, Felixstowe, 10.10 - 1 found at rest on a concrete post (G. Grieco); EAST NORFOLK (27): Waxham, 22.8 (KJB per DH); Wheatacre, 13.9, at *Nicotiana* flowers; 2.10; 3.10 (R.P. Harvey per DH); MERIONETHSHIRE (48): Cwm Bychan, 29.8 (NH).
Summary: (1): 6; (3): 1; (6): 1; (9): 6; (10): 2; (13): 4; (14): 1; (15): 2; (18): 1; Essex: 1; (25): 1; (27): 2; (48): 1.

Death's-head Hawk-moth *Acherontia atropos* (Linnaeus) [I]

NORTH SOMERSET (6): Cheddar Gorge, end 6 (per A. Woodhall per RJB); NORTH HAMPSHIRE (12): Selborne, 22.8 (AEA); week-ending 17.9 - 2 (DO per Waring (1993)).

Pine Hawk-moth *Hyloicus pinastri* (Hübner) [I?/V?]

Note: Possible immigrant examples only.

EAST KENT (15): Dungeness, 3.6; 7.6 (SPC & DW); Greatstone, 18.5; 15.6; 25.6 (BB per SPC).

Humming-bird Hawk-moth *Macroglossum stellatarum* (Linnaeus) [I/R(t)?/R?]

WEST CORNWALL (1): St. Agnes, Isles of Scilly, 13.6 - 2; 1.9; 2.9; 5.9; 8.9 (JWH & MEH); SOUTH DEVON (3): Hooe, near Plymouth, 28.6 (VT); South Milton Ley, Thurlestone, undated (VT); Strete Gate, Slapton Sands, 1.8; 3.8; 7.8 - 2; 8.8 - 2; 10.8; 12.8; 13.8 - 3; 14.8 - 3; 14.8 - 5; 15.8; 18.8 - 2; 24.8 - 3; 26.8 - 3; 28.8; 31.8 (possibly only about 3 moths involved over these dates) (HLO'H); West Charleton, nr. Kingsbridge, 25.7 (PS per VT); SOUTH SOMERSET (5): Hinckley Point, end 1 (K. Cadwalдар per KB); DORSET (9): Portland, 27.4; 24.7; 6.8 (MC); WEST SUSSEX (13): Climping, 7.8; 15.8 (RJK per CRP); EAST SUSSEX (14): Beachy Head, 24.3 (R.H. Charlwood per CRP); EAST KENT (15): Dungeness, 10.8; 13.8; 20.8; 3.9 (DW & SPC); NORTHAMPTONSHIRE (32): Great Houghton, undated (A. Pyke); SOUTH-EAST YORKSHIRE (61): Spurn Head, 16.7 (BS); CHANNEL ISLANDS (113): Guernsey, La Coutanche, 4.11 (Austin 1993); CO. DOWN (H38): Johns Island, Copelands, 26.9 - 5+ (N. McKee per IR); Killard Point, 27.8 - 3 (S. Foster per Miss J. Montgomery per IR).
Summary: (1): 6; (3): 33; (5): 1; (9): 3; (13): 2; (14): 1; (15): 4; (61): 1; (113): 1; (H38): 8+.

Spurge Hawk-moth *Hyles euphorbiae* (Linnaeus) [I]

EAST KENT (15): Dungeness, 12.8 - 1 female (DW per SPC).

Bedstraw Hawk-moth *H. gallii* (Rottemburg) [I]

EAST KENT (15): Greatstone, 9.6 - 1 female (RET per SPC); WEST GLOUCESTERSHIRE (34): St Briavels, Lydney, 10.6 - 1 to actinic light (R. Gaunt); NORTH LINCOLNSHIRE (54): Gibraltar Point, 7.6 (K. Wilson per RJ).

Silver-striped Hawk-moth *Hippotion celerio* (Linnaeus) [I]

DORSET (9): Coombe Keynes, 19.10, found resting on a flower (Mrs A. Johnson per PHS per DHS).

NOTODONTIDAE**Tawny Prominent *Harpyia milhauseri* (Fabricius) [I]**

EAST KENT (15): Dungeness, 24.5 - 1 male (KR per SPC).

LYMANTRIDAE**Brown-tail *Euproctis chrysorrhoea* (Linnaeus) [I?/V?/R?]**

Note: Records outside known resident range only.

EAST NORFOLK (27): Hemsby, 30.6; 2.7 (KJB per DH).

Gypsy Moth *Lymantria dispar* (Linnaeus) [I]

ISLE OF WIGHT (10): Chale Green, 1.9 - 1 male (SC per SAKJ).

ARCTIIDAE**Jersey Tiger *Euplagia quadripunctaria* (Poda) [I?/R(t)?/V?]**

DORSET (9): Portland, 14.8 (MC); ISLE OF WIGHT (10): Freshwater, 19.8 - 1 female (SAKJ); 21.8 (DBW per SAKJ).

NOLIDAE**Scarce Black Arches *Nola aerugula* (Hübner) [I]**

EAST KENT (15): Greatstone, 2.7 - 1 male (BB per SPC).

NOCTUIDAE**Crescent Dart *Agrotis trux* (Hübner) [I?/V?]**

EAST KENT (15): Dungeness, 11.9 - 1 male (SPC).

Radford's Flame Shoulder *Ochropleura leucogaster* (Freyer) [I]

EAST KENT (15): Dungeness, 11.10 - 1 male (SPC).

Great Brocade *Eurois occulta* (Linnaeus) [I]

SOUTH-EAST YORKSHIRE (61): Spurn Head, 15.9 (BS).

White-point *Mythimna albipuncta* ([Denis & Schiffermüller]) [I/R(t)?]

WEST CORNWALL (1): St. Agnes, Isles of Scilly, 5.6; 29.8; 31.8 - 2 (JWH & MEH); DORSET (9): Durlston, 29.1; 29.6 (per DB³); Portland, 14.8 to 14.9 - 24 (peak on 15.8 - 4) (MC); West Bexington, 7.6; 25.8; 15.9 (RME); Woolgarston, Corfe Castle, 20.9 (DB³); ISLE OF WIGHT (10): Binstead, 9.6 (BJW per SAKJ); Chale Green, 27.5; 1.9; 2.9 (SC per SAKJ); Freshwater, 12.9; 20.9; 21.9 - 2 (SAKJ); Niton, 2.9 (AW per SAKJ); SOUTH HAMPSHIRE (11): Brockenhurst, 8.9; 9.9 (JEC); East Boldre, 8.6; 13.6 (GEH); Hengistbury Head, 15.9; 7.10 (MJ per BG); WEST SUSSEX (13): Walberton, 21.8; 2.9; 8.9; 19.9 (JTR per CRP); EAST SUSSEX (14): Beachy Head, 20.9 - 2 (JC); Crowborough, 15.9 (MJS per CRP); Peacehaven, 16.9 (CRP); Ringmer, 20.9 (AB per CRP); EAST KENT (15): Densole, 25.8 - 2; 26.8; 29.8; 19.9; 20.9 (TR per SPC); Dungeness, 6.9; 2.7; 17.8; 29.8 - 2; 30.8; 31.8; 3.9; 4.9 - 3; 6.9 - 2; 10.9; 11.9 - 3; 14.9; 15.9; 17.9; 18.9; 19.9; 20.9 (SPC, KR per SPC and DW per SPC); 9.6 - 2; 8.9 - 5; 20.9 - 2; 6.10 (BFS); 19.8 (JC); Folkestone Warren, 3.10 (TR per SPC); Greatstone, 10.9; 11.9;

14.9 (BB per SPC); Lydd, 22.6; 23.6; 26.8; 27.8; 9.9; 10.9 (KR per SPC); New Romney, 23.8; 1.9; 14.9 (KR per SPC); SURREY (17): Lingfield, 13.9 (JC); SOUTH ESSEX (18): Bradwell-on-Sea, 8.6 - 1 male; 17.6 - 1 male; 22.6 - 1 male; 8.8 - female; 13.8 - 1 male; 16.8 - 1 female; 21.8 - 1 male; 10.9 - 1 male; 12.9 - 1 male; 19.9 - 1 male; 22.9 - 1 female (AJD); 26.6 - 1 male; 14.8 - 1 female; 10.9 - 1 female; 11.9 - 1 male (SD); CHANNEL ISLANDS (113): Guernsey, L'Ancrese, 5.6; 7.8; 20.8 (Austin 1993).
Summary: (1): 4; (9): 30; (10): 9; (11): 6; (13): 4; (14): 5; (15): 53; (17): 1; (18): 15; (113): 3.

The Delicate *M. vitellina* (Hübner) [I/R(t)?]

WEST CORNWALL (1): Coverack, 18.9 - 2; 19.9 - 3; 20.9 - 4; 21.9 - 5; 22.9 - 5; 23.9 - 10 (DB); North Predannack Downs, The Lizard, 12.10 (AS); St. Agnes, Isles of Scilly, 12.4 - 2; 13.4 - 2; 14.4 - 5; 15.4 - 3; 25.4; 5.5; 20.5 - 7; 21.5; 23.5 - 8; 25.5 - 3; 26.5; 28.5 - 7; 29.5; 31.5 - 3; 2.6 - 2; 4.6 - 6; 5.6; 6.6 - 3; 8.6 - 3; 11.6; 19.6; 23.6; 30.6 - 2; 3.7 - 3; 31.8 - 2; 4.9 - 2; 8.9 - 3; 12.9 - 2; 14.9 - 4; 15.9 - 7; 21.9 - 13; 21.9 - 5; 23.9 - 2; 26.9; 28.9 - 5; 6.10; 9.10 - 2; 10.10; 12.10 - 4; 13.10 - 4; 26.10; 30.10; 31.10; 2.11 (JWH & MEH); EAST CORNWALL (2): Carlyon Bay, St. Austell, 24.9 (AS); Tregarne, 2.8; 11.10 (A. Spalding); NORTH SOMERSET (6): Westonzoyland, 3.7 (D. Miller per KB); DORSET (9): Durlston, 11.10 - 4; 12.10 - 4 (DB); 4.9; 8.9 - 2; 20.9 - 2; 25.9; 9.10; 11.10; 12.10 - 2; 13.10; 4.11 (per DB²); Portland, 19.6 - 2; 4.7 - 8; 11.9 - 2; 7.9 - 13; 8.11 (MC); Studland, 10.10 - 5; 11.10 - 3; 12.10 - 3 (DB); West Bexington, 13.6; 14.6; 21.6; 23.6; 25.6; 27.6; 30.6; 10.9; 15.9; 20.9; 22.9; 24.9; 25.9; 2.10; 10.10; 11.10; 25.10; 27.10; 30.10 (RME); Woolgarston, Corfe Castle, 27.6; 1.7; 2.7; 4.7; 18.7; 22.7; 26.7; 14.9 - 2; 19.9; 23.9 - 2 (DB²); ISLE OF WIGHT (10): Chale Green, 30.6; 22.7; 11.9 - 2; 11.10 - 4; 3.11 - 2 (SC per SAKJ); Cranmore, 2.7; 4.11 (SAKJ); Freshwater, 4.7; 9.7; 15.7; 15.9; 25.9; 29.9; 12.10; 27.10; 28.10 (SAKJ); 27.6 - 2; 29.6 - 2 (DBW per SAKJ); Niton, 17.7 (AW per SAKJ); SOUTH HAMPSHIRE (11): Brockenhurst, 27.6; 9.9 (JEC); Hegistbury Head, undated - 21 (MJ per BG); Woolston, Southampton, 14.7 (ARC); NORTH HAMPSHIRE (12): Selborne, 4.7 (AEA); WEST SUSSEX (13): Climping, undated (R.J.L. Kemp per CRP); Middleton-on-Sea, 10.9 (R.J. Brooker per IDM); Walberton, 29.7; 20.9; 9.10; 10.10; 11.10; 24.10; 26.10; 28.10 (JTR per CRP); EAST SUSSEX (14): Crowborough, 28.7, 11.10 (MJS per CRP); Peacehaven, 19.6; 1.7 (CRP); EAST KENT (15): Densole, 8.9; 11.9; 16.9; 19.9 - 2; 25.9 - 2; 8.10; 10.10; 11.10 (TR per SPC); Dungeness, 22.6; 10.9; 11.9; 21.9; 14.9 - 2; 20.9 - 2 (DW per SPC); 9.9; 11.9 - 2; 14.9 - 3; 15.9; 3.10 - 2; 7.10; 9.10; 10.10 - 2; 11.10; 12.10 - 2 (KR per SPC); 15.7; 7.9; 11.9; 14.9; 7.10 - 2; 13.10 (SPC); 20.9 - 5; 6.10 - 2 (BFS); Greatstone, 15.6; 29.9; 7.10 - 3; 8.10; 9.10 (BB per SPC); Littlestone, 20.9; 3.11; 4.11 (KR per SPC); Lydd, 9.9; 15.9 - 3; 29.9; 2.10; 13.10 (KR per SPC); New Romney, 9.9; 10.9 - 2; 7.10; 8.10; 10.10 - 2; 11.10 - 3; 12.10 - 2; 23.10 (KR per SPC); SURREY (17): Lingfield, 25.6 - 1 fresh male; 14.7 - 1 male (JC); SOUTH ESSEX (18): Bradwell-on-Sea, 28.6; 13.7; 5.8; 13.9; 14.9 - 3; 19.9 - 3; 20.9; 21.9 - 2; 22.9 - 3; 23.9 - 2; 8.10; 9.10; 10.10; 11.10 - 3; 12.10 - 2 (AJD); 13.9 - 2; 16.9 (SD); CHANNEL ISLANDS (113): Guernsey, St. John, 14.7 (Austin 1993); Guernsey, L'Ancrese, 16.7; 11.9 (Austin 1993).
Summary: (1): 160; (2): 3; (6): 1; (9): 88; (10): 26; (11): 24; (12): 1; (13): 10; (14): 4; (15): 78; (17): 2; (18): 29; (113): 3.

White-speck *M. unipuncta* (Haworth) [I]

WEST CORNWALL (1): Coverack, 22.9 (DB); North Predannack Downs, The Lizard, 12.10 (AS); St. Agnes, Isles of Scilly, 30.4; 20.5; 23.5; 26.5; 29.5; 15.9; 17.9; 21.9; 23.9; 26.9; 28.9; 4.10; 9.10 - 2; 10.10; 12.10 - 3; 13.10; 19.10; 20.10 (JWH & MEH); DORSET (9): Durlston, 10.10 - 2; 11.10 - 4 (DB); 9.10; 10.10; 11.10 - 3 (per DB²); Portland, 2.10 (MC); Studland, 10.10 (DB); West Bexington, 10.10; 11.10 (RME); SOUTH HAMPSHIRE (11): Christchurch, 17.9 (MJ per BG); Hengistbury Head, 24.9; 7.10 (MJ per BG); NORTH HAMPSHIRE (12): Selborne, 20.9 (AEA); WEST SUSSEX

(13): Walberton, 20.9 (JTR per CRP); EAST KENT (15): Dungeness, 29.9; 3.10 (SPC); 11.10 (DW per SPC); SOUTH ESSEX (18): Bradwell-on-Sea, 22.9 (AJD); OXFORDSHIRE (23), Long Wittenham, Abingdon, 11.10 (DO).

Summary: (1): 23; (9): 15; (11): 3; (12): 1; (13): 1; (15): 3; (18): 1; (23): 1.

The Cosmopolitan *M. loreyi* (Duponchel) [I]

WEST CORNWALL (1): St. Agnes, Isles of Scilly, 25.5; 15.9; 17.9 (JWH & MEH).

Flame Brocade *Trigonophora flammea* (Esper) [I]

Note: Does not include Channel Islands where the species is resident.

DORSET (9): Durlston, 9.10 (per DB²); 10.10 (P. Sharpe); EAST KENT (15): Dungeness, 10.10 - 1 male (A. Butcher per SPC); 12.10 - 1 male (KR per SPC).

The Concolorous *Chortodes extrema* (Hübner) [I?/V?]

EAST KENT (15): Dungeness, 10.6 (SPC); Greatstone, 1.6 (BB per SPC).

Small Mottled Willow *Spodoptera exigua* (Hübner) [I]

WEST CORNWALL (1): Tregarne, 11.10 (AS); SOUTH HAMPSHIRE (11): Beaulieu, undated (recorded as "[fairly common]") (BIJ per BG); Woolston, Southampton, 27.8 (ARC).

Porter's Rustic *Proxenus hospes* (Freyer) [I]

WEST CORNWALL (1): St Agnes, Isles of Scilly, 14.9 (JWH & MEH, see also Agassiz (1994)).

Scarce Bordered Straw *Heliocoverpa armigera* (Hübner) [I]

WEST CORNWALL (1): St. Agnes, Isles of Scilly, 7.9 - 1 found by day (JWH & MEH).

Bordered Straw *Heliothis peltigera* ([Denis & Schiffermüller]) [I]

NORTH LINCOLNSHIRE (54): Hemswell, 2.7 (RJ).

Silver Barred *Deltote bankiana* (Fabricius) [I?/V?]

EAST SUSSEX (14): Peacehaven, 9.6 (CRP); EAST KENT (15): Dungeness, 9.6 - 1 (BFS); SOUTH ESSEX (18): Bradwell-on-Sea, 26.5 (AJD); EAST NORFOLK (27): Hemsby, 9.6 (K.J. Brett, conf. G. Haggett per DH); Scole, 6.6 (M.R. Hall).

Golden Twin-spot *Chrysodeixis chalcites* (Esper) [I]

EAST KENT (15): Lydd, 19.8 - 1 male (Miss P. Carter per SPC); SOUTH ESSEX (18): Bradwell-on-Sea, 20.9 - 1 female; 22.9 (AJD).

Dewick's Plusia *Macdunnoughia confusa* (Stephens) [I]

EAST KENT (15): New Romney, 21.9 - 1 male (KR per SPC).

Gold Spangle *Autographa bractea* ([Denis & Schiffermüller]) [I?/V?]

SOUTH ESSEX (18): Bradwell-on-Sea, 22.7 (AJD).

Clifden Nonpareil *Catocala fraxini* (Linnaeus) [I]

WEST CORNWALL (1): Cot Manor, near St. Just, 14.8 (K. Jackson per Spalding (1994)).

Rosy Underwing *C. electa* (Vieweg) [I]

DORSET (9): Portland, 11.9 (MC).

Lunar Double-stripe *Minucia lunaris* ([Denis & Schiffermüller]) [I]

DORSET (9): Gaunts Common, 26.5 (PD per DB per BFS).

Olive Crescent *Tristalis emortalis* ([Denis & Schiffermüller]) [I]
SOUTH ESSEX (18): Bradwell-on-Sea, 9.6 - 1 female (AJD).

ANNEX 2: SELECTED RECORDS OF "COMMONER" SPECIES

This annex gives a very brief summary of the abundance over the year as well as the earliest and latest date for the more frequent immigrant species which are not covered in Annex 1. Other significant records or observations for 1993 which have been received and were not covered in Annex 1, such as large numbers of an individual species, are also given.

YPONOMEUTIDAE

Plutella xylostella (Linnaeus)

Few records received and, although those that were provided no clear picture of abundance, it would appear to have been a poor year for the species. Over the year, a total of 254 were recorded at Portland, Dorset (9) (MC) and 28 were recorded at Peacehaven, East Sussex (14) (CRP).

Earliest date: SOUTH HAMPSHIRE (11): Winchester, 21.4 (DHS).

Latest date: DORSET (9): Portland, 7.11 (MC).

Other significant record: DORSET (9): Portland, 12.6 - 31 (MC).

PYRALIDAE

Udea ferrugalis (Hübner)

Comparatively few records received. Over the year, a total of 2 were recorded at Peacehaven, East Sussex (14) (CRP), 20 were recorded in the Dungeness area, East Kent (15) (per SPC) and 21 were recorded at Bradwell-on-Sea, South Essex (18) (AJD & SD). Earliest date: WEST CORNWALL (1): St. Agnes, Isles of Scilly, 30.4 (JWH & MEH).

Latest date: WEST CORNWALL (1): St. Agnes, Isles of Scilly, 18.11 (JWH & MEH).

Other significant records: WEST CORNWALL (1): St. Agnes, Isles of Scilly, 6.10 - 14; 12.10 - 29; 4.11 - 13 (JWH & MEH); CHANNEL ISLANDS (113): Guernsey, L'Ancrese 16.7 - 10; 23.7 - 11; 7.8 - c.15; 28.8 - c.12; 11.9 - 32 (Austin 1993).

Nomophila noctuella ([Denis & Schiffermüller])

Records received of approximately only 160 individuals. Over the year, a total of 2 were recorded at Peacehaven, East Sussex (14) (CRP) and 25 were recorded at Bradwell-on-Sea, South Essex (18) (AJD & SD).

Earliest date: ISLE OF WIGHT (10): Freshwater, 25.4 (SAKJ).

Latest date: SURREY (17): Lingfield, 4.11 (JC).

Other significant record: WEST CORNWALL (1): St. Agnes, Isles of Scilly, 12.10 - 29 (JWH & MEH).

PIERIDAE

Large White *Pieris brassicae* (Linnaeus)

Possibly significant records only: DORSET (9): Portland, strong northerly movements, in off the sea 16.8; 20.8 (MC).

NYMPHALIDAE

Red Admiral *Vanessa atalanta* (Linnaeus)

Many records received.

Earliest date: WEST CORNWALL (1): St. Agnes, Isles of Scilly, 14.1 (MEH & M. Horobin).

Latest date: CO. DOWN (H38): Helens Bay, 8.11 (T. Boyd per IR).

Other significant records: SOUTH DEVON (3): Rame Head and coastal strip to Penlee area, 15.9 - 500+ nectaring on ivy (VT); Strete Gate, Slapton Sands, 28.5 - 10; 4.9 - 30 (HLO'H); DORSET (9): Portland, 17.9 - large numbers (MC); WEST SUSSEX (13): Hove, 18.9 - 10 at one time on ivy (R.M. Craske per CRP); EAST SUSSEX (14): Peacehaven, 10.8 - 1 at mv light (CRP); SOUTH ESSEX (18): Bradwell-on-Sea, 20.4 - 10; 30.4 - 11; 20.6 - 20; 7.8 - 28 (AJD); SOUTH-EAST YORKSHIRE (61): Spurn Head, 10.6 - 30 (BS); CO. DOWN (H38): Arboretum, Castlewellan Forest, 15.8 - 10; 13.9 - 12; 20.9 - 10 (Mrs A. McComb per IR); Ballyskeagh, Newtonards, 22.9 - 12 (J. Phillips per IR); Glasdrumman House, Newcastle, 17.9 - 12 (Mrs A. McComb per IR); Johns Island, Copelands, 9.10 - 12 (N. McKee per IR).

Painted Lady *V. cardui* (Linnaeus)

Records received of only about 110 individuals.

Earliest date: DORSET (9): Portland, 25.4 (MC).

Latest date: NOTTINGHAMSHIRE (56), Colwick Park, 25.9 (A.S. Boot per Dr S. Wright).

NOCTUIDAE

Dark Sword-grass *Agrotis ipsilon* (Hufnagel)

Received records suggest a comparatively poor year. Over the year, a total of 69 were recorded at the Portland Bird Observatory, Dorset (9) (MC), 2 were recorded at Peacehaven, East Sussex (14) (CRP), 30 were recorded in the Dungeness area, East Kent (15) (per SPC) and 13 were recorded at Bradwell-on-Sea, South Essex (18) (AJD & SD).

Earliest date: WEST CORNWALL (1): St. Agnes, Isles of Scilly, 13.4 - 2 (JWH & MEH).

Latest date: WEST CORNWALL (1): St. Agnes, Isles of Scilly, 5.11 (JWH & MEH).

Other significant records: DORSET (9): Portland, 14.4 to 5.5 - 49; 25.7 to 14.9 - 20 (MC).

Pearly Underwing *Peridroma saucia* (Hübner)

Comparatively few records received comprising approximately 170 individuals. Over the year, a total of 17 were recorded at the Portland Bird Observatory, Dorset (9) (MC), none were recorded at Peacehaven, East Sussex (14) and 5 were recorded at Bradwell-on-Sea, South Essex (18) (AJD & SD).

Earliest date: Bristol, 12.2 (dead on a pavement) (P.J. Chadwick per RJB).

Latest date: DORSET (9): West Bexington, 1.12 (RME).

Silver Y *Autographa gamma* (Linnaeus)

Many records received, although possibly not as many as in some other recent years. Over the year, a total of 518 were recorded at the Portland Bird Observatory, Dorset (9) (MC), 301 were recorded at Peacehaven, East Sussex (14) (CRP) and 1,824 were recorded at Bradwell-on-Sea, South Essex (18) (AJD & SD).

Earliest date: SOUTH HAMPSHIRE (11): Woolston, Southampton, 17.3 (ARC).

Latest date: SOUTH SOMERSET (5): North Cheriton, 9.12 - freshly emerged example at rest on a wall (KB).

Selected significant records only: DORSET (9): Portland, 24.9 - 39 (MC); EAST SUSSEX (14): Peacehaven, 19.7 - 52 (CRP); SOUTH ESSEX (18): Bradwell-on-Sea, 17.7 - 31; 6.8 - 129; 7.8 - 128; 20.8 - 115 (AJD).

Initials of recorders

The recorders initials are listed alphabetically so that records can be extracted with relative ease.

AEA	A.E. Aston	DO	Dr D. Owen	MJ	M. Jeffes
AB	A. Batten	DW	D. Walker	MJS	M.J. Simmons
AG	A. Gardner	GEH	G.E. Higgs	NH	N. Hall
AJD	A.J. Dewick	GH	G. Hart	PD	P. Davey
ARC	A.R. Collins	HLO'H	H.L. O'Heffernan	PHS	Dr P.H. Sterling
AS	A. Spalding	IDM	I.D. Masters	PS	P. Sanders
AW	Mrs A. Wilkinson	IR	I. Rippey	RAS	R.A. Softly
BB	B. Banson	JC	Dr J. Clarke	RET	R.E. Turley
BFS	B.F. Skinner	JEC	J.E. Chainey	RFMc	R.F. McCormick
BG	B. Goater	JTR	J.T. Radford	RJ	R. Johnson
BIJ	B. Ivon-Jones	JWH	J. Hale	RJB	R. Barnett
BJW	B.J. Warne	KB	K. Brown	RJLK	R.J.L. Kemp
BS	B. Spence	KGMB	K.G.M. Bond	RME	R.M. Eden
CRP	C.R. Pratt	KJB	K.J. Brett	SAKJ	S.A. Knill-Jones
DB	D. Brown	KR	K. Redshaw	SC	S. Colenutt
DB ²	D. Burt	KW	K. Wilson	SD	S. Dewick
DBW	D.B. Wooldridge	MC	M. Cade	SPC	S.P. Clancy
DD	D. Dey	MEH	M.E. Hicks	TR	T. Rouse
DH	D. Hipperson	MH	M. Hill	VT	V. Tucker
DHS	Col. D.H. Sterling				

Other contributors

T. Beynon; A. Binding; J.L. Campbell; R.R. Cook; M.A. Enfield; P. Fleming; S.V. Gauld; R. Gaunt; G. Grieco; M.R. Hall; A. Harmer; A. Knight; R. Leverton; M.S. Parsons; R.D. Penhallurick; A. Pyke; A.N. Scott; P. Sharpe; B. Shreeve; W. & K. Wheatley; J. Whiteside; Dr S. Wright.

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